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**Writing for a Purpose: Journal Writing – Adding Details**

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**MATHEMATICS Grade 10-12**

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In a first attempt at a journal, often important information or connections are overlooked. In this strategy, students are given a paragraph from a sample journal. By asking critical questions they determine how the paragraph can be improved, thus fine tuning their journal writing skills.

**Purpose**

- Provide additional specific and supportive detail in the writing.

**Payoff**

Students will:

- add depth and breadth to their writing by including appropriate details.

**Tips and Resources**

- Provide the students with copies of the various journal forms. Examples of summary, explanation, and problem design journal forms are included as Samples A – C respectively. For other journal forms see Teacher Resource: *Journal Writing – Forms and Writing Prompts*.
- Use coloured paper when copying journal material. This will help students find the appropriate handouts quickly.
- Make sure the paragraph composed for this activity is “bare-bones,” leaving out most details and including many unanswered questions. (See Teacher Resource: *Adding Details – Samples A - C*.)
- Be sure that the topic is familiar to all of your students so that everyone is engaged. Leave the newer and less familiar topics for group and personal journal writing.
- Encourage students to use anecdotes and examples, as well as facts.
- For annotated samples, see Teacher Resource, *Writing for a Purpose: Journal Writing – Adding Details - Samples A - C*.

As a next step in the writing process, please see **Revising Editing: Asking Questions to Revise Writing** in *Think Literacy Approaches Grades 7-12 (2003)*.

**Further Support**

- The following lesson plan has been organized to introduce class journal writing. To use this strategy for group journals and personal journals please see Teacher Resource, *Journal Writing – Linking Process, Strategies and Developmental Stages*.



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**Notes**

What teachers do	What students do
<b>Before</b> <ul style="list-style-type: none"> <li>▪ Select a journal prompt.</li> <li>▪ Compose a brief paragraph that explains or describes something that the students have studied before. (See Teacher Resource, <i>Adding Details</i>: Samples A – C.)</li> <li>▪ Copy the paragraph for the class and make a transparency for yourself.</li> <li>▪ Copy a class set of the Student/Teacher Resource: <i>Stretching Ideas</i> located in <i>Think Literacy Cross-Curricular Approaches Grades 7-12</i>, page 122.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Bring a copy of the journal prompts to class.</li> </ul>
<b>During</b> <ul style="list-style-type: none"> <li>▪ Identify the journal prompt being used.</li> <li>▪ Distribute the <i>Stretching Ideas</i> handout and read it with the class.</li> <li>▪ Read the paragraph to the class.</li> <li>▪ Model how to apply the <i>Stretching Ideas</i> handout to the first few sentences in the paragraph.</li> <li>▪ Ask students to reread the paragraph and then to identify all the places where more information is needed.</li> <li>▪ Respond to student questions by adding more details, examples, or anecdotes.</li> <li>▪ Guide students in a discussion to see how additional supporting detail improves the quality of the writing.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Read the paragraph and the <i>Stretching Ideas</i> handout.</li> <li>▪ Ask questions about the missing detail using the <i>Stretching Ideas</i> handout as a guide. Record these questions.</li> <li>▪ Share these questions with the class.</li> <li>▪ Record questions and make notes on how to answer these questions.</li> </ul>
<b>After</b> <ul style="list-style-type: none"> <li>▪ Model how to answer a few of the questions within the context of the paragraph.</li> <li>▪ Assign revision of the paragraph for homework.</li> <li>▪ (Optional) Have students work with the handout and their revised draft to identify further areas for revision.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Complete revision of the first draft for homework.</li> <li>▪ Use the handout and the revised draft (individually or in pairs) to identify further areas for revision.</li> </ul>

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Sample A – MCF 3M

Questions to help stretch ideas.	Journal Response
How is a proportion applied to baking?	Proportional relationships occur in every part of our lives. You can apply proportions to purchases, wages, baking, currency exchange, and simple interest. Just remember that proportions are fractions in disguise.
Why is the statement “A fraction is an example of a proportion” wrong?	A fraction is an example of a proportion. By using that idea you can solve lots of proportion questions. Just set up your proportion like a fraction and cross multiply. As long as both numbers on the top represent the same thing, your answer should be correct. You can keep making up new proportions and record them in a table of values. If you plot them you will get a line. So proportions are represented by linear relations as well.
What does a proportion look like if it is not in fraction form?	Keep your proportion organized and cross multiply to get the answer. That’s the way to use proportions in your daily life.
<p>Student Editorial Notes:</p> <p>How is a proportion applied to baking? It can be used to increase or decrease the quantity baked.</p> <p>A fraction is a ratio, but a proportion is an equality of two ratios. Realizing this idea the rest of the paragraph must be fixed.</p>	



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Sample A – MCF 3M

Questions to help stretch ideas	Journal Response
	<p>Proportional relationships occur in every part of our lives. You can apply proportions to purchases, wages, baking, currency exchange, and simple interest. Just remember that proportions are fractions in disguise.</p> <p>A fraction is an example of a proportion. By using that idea you can solve lots of proportion questions. Just set up your proportion like a fraction and cross multiply. As long as both numbers on the top represent the same thing, your answer should be correct. You can keep making up new proportions and record them in a table of values. If you plot them you will get a line. So proportions are represented by linear relations as well.</p> <p>Keep your proportion organized and cross multiply to get the answer. That's the way to use proportions in your daily life.</p>



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Sample B – MCF 3M

Questions to help Stretch Ideas	Journal Response
What are the important parts of a compound interest question?	Finding the value of an investment can be difficult if you do not understand the terminology in the question. By first highlighting the important words, the steps are easy to follow.
What is an example of a compound interest question?	First, you need to read that the interest rate is “compounded”. Then, using the frequency of the compounding period, apply that to finding $i$ and $n$ . For example, the term “monthly” means 12, “quarterly” means 4 and “semi-annually” means 2. “Annually” is easy, that means 1. Using that fact you divide the $i$ and multiply the $n$ by 12, 4, 2 or 1. In case you forget to “divide the $i$ ” just say the phrase by emphasizing the $i$ in the word divide. Substitute the values for $n$ and $i$ into the compound interest formula and find the answer using your calculator.
What is the compound interest formula?	You will be surprised at how easy compound interest questions will be if you follow those three steps.
<b>Student Editorial Notes:</b>  One sample note: the interest rate, the period, and the principal.	



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### Sample C - MAP 4C

Questions to help stretch Ideas	Journal Response
<p>What is time and height measured in?</p> <p>Why do we set t greater than or equal to zero?</p> <p>Why did you remove t = -5 as a solution?</p> <p>How do we know that the ball is in the air at t = 0?</p> <p>Where is your conclusion? What details should your conclusion include?</p>	<p><b>Sample C: MAP 4C</b></p> <p>There are many situations that can be modeled using the quadratic function. In many situations, the path of a ball, profit, the area of a swimming pool, and a city's population growth can be represented using the form <math>y = ax^2 + bx + c</math>.</p> <p>Let <math>h = -t^2 - t + 20</math>, where h is the height of the ball and t is the time after it was first tossed; t is greater than or equal to 0. Since the coefficient of the <math>t^2</math> is negative, we also know that the graph opens downward and has a maximum value. To learn more about the graph we can investigate the x intercepts. By setting h = 0, we find the t intercepts -5 and 4. We remove t = -5 as a solution. Height can not be negative so we also remove values of t &gt; 4. We also know that the ball is already in the air at t = 0.</p> <p>Now that we have a picture of the parabola in our mind, we can make up a question. Using the equation <math>h = -t^2 - t + 20</math>, what is the height of the ball when t = 0? How high does the ball travel? How far has the ball traveled when it finally hits the ground?</p>
<p><b>Student Editorial Notes:</b></p> <p><b>Sample note:</b></p> <p>We would remove t=-5 as a solution because we set t = 0 in the question.</p>	